

SubB1
cont. → continuous polymerization wherein at least one parameter biasing the polymerization
is varied according to a recurring pattern.

A1
2. (Amended) The polymer compositions according to claim 1, characterized in
that said recurring pattern is an oscillation about a mean value which can be selected at
random.

Please delete Claim 4.

Please amend claims 5-14 as follows:

5. (Amended) The polymer compositions according to claim 1 characterized in
that the polymerization is effected on a moving support.

A²
6. (Amended) The polymer compositions according to claim 1 characterized in
that co- or terpolymer compositions are concerned.

7. (Amended) The polymer compositions according to claim 1 characterized in
that the monomers containing acid groups are acrylic acid, methacrylic acid and/or
2-acrylamido-2-methylpropanesulfonic acid.

8. (Amended) The polymer compositions according to claim 1 characterized in
that the monomers containing acid groups are neutralized to at least 50 mole-%.

9. (Amended) The polymer compositions according to claim 1 characterized in
that the only monomer containing acid groups is acrylic acid neutralized to 50-80 mole-%.

10. (Amended) The polymer compositions according to claim 1 characterized in that water-soluble polymers according to d) are employed at concentrations of 1 - 5 wt.-%.

11. (Amended) The polymer compositions according to claim 1 characterized in that the water-soluble polymers are starch and/or polyvinyl alcohol.

12. (Amended) The polymer compositions according to claim 1 characterized in that the compositions are mixed with 0.05 - 3 wt.-% of a compound capable of reacting with at least two carboxyl groups and heated to 150-250° C.

SubB3 13. (Amended) A process for the continuous production of powdered, crosslinked polymer compositions absorbing aqueous or serous fluids, as well as blood, comprising:

a) 55 - 99.9 wt.-% of at least one polymerized, ethylenically unsaturated, polymerizable monomer which contains acid groups neutralized to at least 25 mole-%;

b) 0 - 40 wt.-% of polymerized, unsaturated monomers copolymerizable with a);

c) 0.01 - 5.0 wt.-% of one or more crosslinking agents;

d) 0 - 30 wt.-% of a water-soluble polymer, the weight amounts a)

through d) being based on anhydrous polymer composition, and the sum of these components always being 100 wt.-%, the monomer solution being polymerized to form a gel, said gel being dried and crushed, characterized in that at least one parameter biasing the polymerization is varied according to a recurring pattern.

A²

14. (Amended) The process according to claim 13, characterized in that said recurring pattern is an oscillation about a mean value which can be selected at random.

Please delete claim 16.

Please amend claims 17-24 as follows:

17. (Amended) The process according to claim 13 characterized in that the polymerization is effected on a moving support.

A³

18. (Amended) The process according to claim 13 characterized in that the polymer composition is powdered subsequent to drying.

19. (Amended) The process according to claim 18, characterized in that the powdered polymer product is mixed with 0.05 - 3 wt.-% of a compound capable of reacting with at least two carboxyl groups and heated to 150-250°C.

Sub B³

20. (Amended) Use of the polymer composition according to claim 1 as an absorbent for water and aqueous liquids.

21. (Amended) Use of the polymer composition according to claim 1 as an absorbent in constructions used to absorb body fluids.

22. (Amended) Use of the polymer composition according to claim 1 as a component in electroconductive or light-conducting cables which absorbs water and aqueous liquids, as a component in packaging materials, as soil improver, and in plant breeding.